

NASANational Aeronautics and
Space Administration

Goddard Space Flight Center

Goddard News

Greenbelt, Maryland and Wallops Island, Virginia

Vol. 33 No. 4 April 1987

Fisk To Head NASA Office of Space Science & Applications

*FISK*

A former Goddard astrophysicist has been named NASA Associate Administrator for Space Science and Applications at NASA Headquarters.

Dr. Lennard A. Fisk will be responsible for NASA's space science and applications programs, as well as the activities of Goddard and the Jet Propulsion Laboratory.

Prior to his appointment, Fisk was Vice President for Research and Financial

Affairs, University of New Hampshire, Durham.

Fisk joined the University of New Hampshire in September 1977 as an Associate Professor of Physics. In July 1980, Fisk was named project director, Solar Terrestrial Theory Group and in September 1981, he was named Professor of Physics. He continued both these activities in addition to his Vice President duties.

From June 1971 to August 1977, Fisk was an astrophysicist at Goddard. He was a National Academy of Sciences Postdoctoral Research Fellow at Goddard from September 1969 to June 1971.

A graduate of Cornell University, Fisk earned his doctorate degree in applied physics from the University of California, San Diego, in December 1969.

He was secretary of Solar and Interplanetary Physics subsection of the Solar-Planetary Relations Section, American Geophysical Union and Associate Editor, *Journal of Geophysical Research*, in the early 1980s. He also has served on numerous science advisory panels since 1973.

Fisk succeeds Dr. Burton I. Edelson, who announced plans to leave the space agency in early spring.

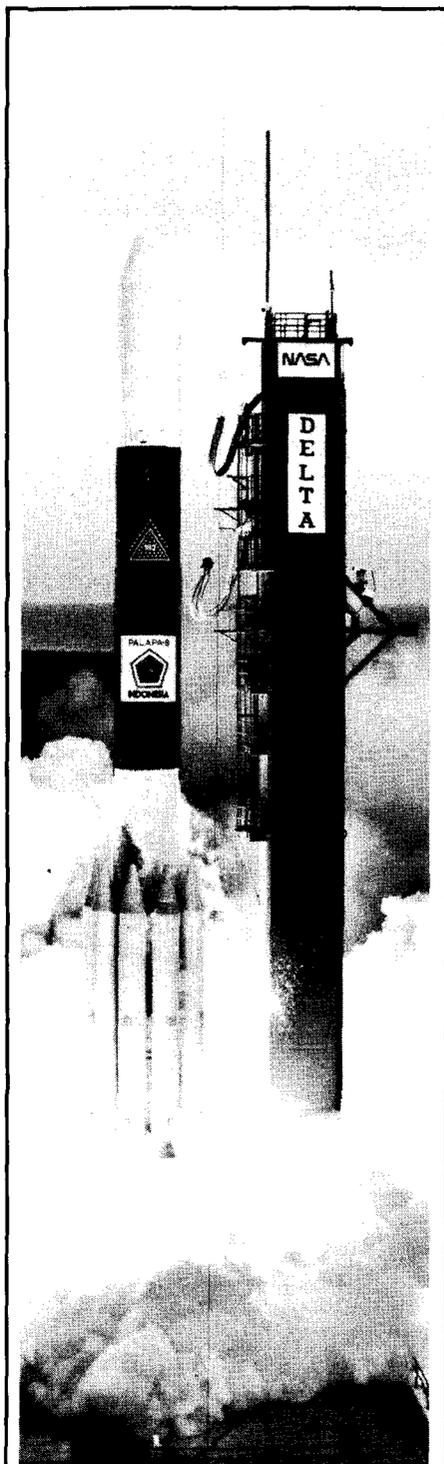
Busse Heads Investigation Board

*BUSSE*

Goddard's Director of Flight Assurance, Jon R. Busse, has been appointed chairman of the team to investigate the March 26 loss of the Atlas Centaur 67 mission. He arrived at the Kennedy Space Center (KSC), FL. on March 28 to begin the investigation.

Rear Admiral Richard H. Truly, NASA Associate Administrator for Space Flight, announced the composition of the board which will investigate and recommend corrective action for the Atlas Centaur 67 flight failure. The board will report its findings and recommendations not later than May 25, 1987 to Admiral Truly, who will forward them to NASA Administrator Dr. James C. Fletcher.

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DELTA 182 was launched into the late afternoon sky at 5:22 p.m. on March 20 from the Cape Canaveral Air Force Station. Delta 182 carried the Palapa B2-P communications satellite into orbit for the government of Indonesia.

Ten Rockets Launched From Greenland

by Joyce Milliner

NASA successfully launched three suborbital research rockets within 11 seconds recently, concluding a highly-successful international scientific campaign of Sounding Rocket Research conducted from Sondre Stromfjord, Greenland.

Over the past month, ten rockets have been launched successfully from this remote location to investigate the complex interactions between the solar wind and the Earth's atmosphere in the polar cap region where brilliant aurora (northern lights) occur.

This scientific research campaign was the second to be conducted from Greenland during the last three years by NASA, the U.S. Air Force Geophysics Laboratory (AFGL), the Danish Meteorological Institute (DMI) and the National Science Foundation.

In addition to using high-altitude rocket payloads carrying various scientific instruments, aircraft and ground-based observations were included. Five of the rocketborne payloads released harmless chemicals which created artificial ionized clouds up to 300 miles high which were observed by ground observation sites. Of the ten total rocket launchings, eight were sponsored by NASA and two by the Air Force.

The three NASA rockets, launched April 1, included a Black Brant IX, which lifted off at 2:47 a.m. Greenland time, a Taurus-Nike-Tomahawk, which was

launched five seconds later; and another Taurus-Nike-Tomahawk, which lifted off six seconds after the second launch.

Scientific collaborators for these three rocket flights were from Cornell University; University of Alabama, Huntsville; Utah State University; Danish Space Research Institute; and the Royal Institute of Technology, Stockholm.

"We received good data from all three payloads, which reached altitudes of nearly 300 miles," explained Warren Gurkin, Head, Sounding Rocket Projects Branch at Wallops Flight Facility. "In fact, all ten rocket flights in the campaign were successful."

The auroral oval is one of the most turbulent near-Earth plasma and is an excellent location for this type of space science research. NASA often uses suborbital rocket vehicles to place scientific payloads where and when required for the scientists to make measurements in the vicinity of active aurora. Mobile tracking equipment had to be established in Greenland to support these rocket flights.

The experience gained from these measurements will be useful in other NASA and European programs involving satellites to study plasma turbulence in the near-Earth space environment using the same type of measurements of energetic particles and electric fields which were made by the suborbital rocket payloads.

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INTERNATIONAL VISIT — Government Officials from the People's Republic of China toured Goddard's Get Away Special (GAS) facilities recently. The Chinese government has a reservation to fly two student experiments aboard a Shuttle flight targeted for 1988. Pictured: Larry Thomas, GAS Technical Liaison Officer, GAS Special Programs (right) explains a model of the Northern Utah Satellite which flew in a GAS canister on the Shuttle in 1985 to a delegation from the People's Republic of China at the Visitor Center.

Chinese Youngsters Reserve GAS Can

by David Thomas

In China, it's no surprise that "many are called but few are chosen." More than 1 billion people populate the east-Asian country, making it the most populated place in the world. Competition for just about everything is stiff.

This is a case where 200 million were called but only two were chosen. China's 200 million youngsters were notified of the chance to develop an experiment to fly on the U.S. Space Shuttle. Seven-thousand proposals were submitted for reserving space in experiment containers in NASA's Get Away Special Program (GAS).

Two middle-school students, Tian Chunliang, 16, and Wang Nianquing, 17, were winners in a year-long nationwide campaign to select the best space experiments for a Shuttle flight targeted for 1988.

"The American judges were deeply impressed by the standard of hi-tech knowledge displayed by the young Chinese students," according to Dr. Mark Lee from the Jet Propulsion Laboratory, Pasadena, CA, now detailed to NASA Headquarters in Washington, DC.

Dr. Lee founded the Association for the Promotion of Science in China (APSC) in December 1985, after the Chinese Astronautical Society in September 1985 showed interest in NASA's GAS program,

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Investigation Board

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The Executive Secretary to the board is Robert C. Weaver, Goddard's Associate Chief, Special Payloads, Engineering Directorate. Robert C. Baumann, Goddard Deputy Director, Flight Projects Directorate also was named to the board.

Other members of the board are: Kenneth J. Cox, Johnson Space Center (JSC); William C. Bradford, Marshall Space Flight Center (MSFC); Creighton A. Terhune, KSC; Norman C. Wenger, Lewis Research Center (LeRC); Lt. Col. John Kim, and Col. John W. Allsbrook, U.S. Air Force; Bruce D. Fisher, Langley Research Center (LaRC).

Admiral Truly stressed that the review board is a balanced technical organization with experts in the fields of structures, avionics, expendable launch vehicles and

weather and lightning research. None of the board members was involved in the preparation or launch of this particular mission.

The flight of Atlas Centaur 67, carrying the U.S. Navy's Fleet Satellite Communications-6 (FltSatCom-6) spacecraft, ended approximately 51 seconds after an apparently nominal liftoff from Complex 36B, Cape Canaveral Air Force Station, at 4:22 p.m. (EST), March 26, 1987. According to program officials, countdown and liftoff proceeded without difficulty. At about 51 seconds into the flight, the vehicle appeared to have started to tumble and had to be destroyed by the Range Safety Officer. The vehicle was at an altitude of 14,250 feet and downrange from the launch complex approximately one-half mile at the time of destruction.

Gas Can

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managed by the Goddard Space Flight Center.

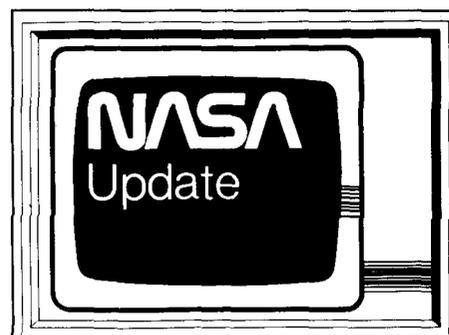
Shortly after Lee's organization was formed, the two groups signed an agreement for the contest among the Chinese youngsters.

"The judges chose Chunliang's proposal to test a 'mixture of two non-infiltratable materials and its surface tension in space,' and Nianqing's proposal to test the 'physical disposal of floating garbage in a space-shuttle,'" according to an article in the China Daily Newspaper. The judges said the two winning proposals were "... not only highly creative but of practical value in space science and technology."

The China Youth Daily and the Chinese Science and Technology Daily Newspapers, plus the Chinese Central Control TV are the early sponsors for the experiments.

Lee said the APSC also will honor all 20 finalists whose proposals were chosen from the 7,000. One of the 18 proposals that did not win will be selected as a reserve candidate. The award ceremony will be held in Beijing next July.

Get Away Special is the popular name for the Self-Contained Payload Program of NASA's Space Transportation System. Through the program, individuals and organizations, both private and public, of all countries are given a chance to fly scientific research and development experiments of their own choosing aboard the Shuttle at comparatively low cost.



STAY TUNED ...

NASA Update, a bi-weekly news magazine program, will be shown continuously from 8 a.m.-5 p.m. on the closed-circuit TV system and in the following locations:

Bldg. 3 Auditorium—Friday, May 1
(8:00 a.m.—3:00 p.m.)

Bldg. 8 Auditorium—Friday, May 15

Bldg. 8 Auditorium—Thursday, May 28

Check *DATELINE GODDARD* and the *GODDARD AUDIO NEWS SERVICE* (286-2890) for details.

Day Care Center Finds New Home

by Randee Exler

While the children at the Goddard Child Development Center are busy building planets for a paper-mache solar system by day, their parents are spending their after hours and weekends putting the finishing touches on the Center's new building.

The Center moved into its new quarters in February. Parents built shelves, painted, installed room dividers and a ceiling and currently are finishing the food preparation area in the building.

"We're delighted to have everything right here," Goddard Child Development Center Director Barbara Karth explained. Storage for the old facility was located in a separate trailer.



CHILD DEVELOPMENT CENTER — Building 90 is the new home of the Goddard Child Development Center. A Silver Spring Boy Scout troop plans to build a playground for the children.

Parents aren't the only ones who have supported the construction of the new building. "There has been tremendous support from both Goddard and the local business community," said Karth. "Everyone did their job plus a little extra."

MAD, Goddard's music and drama club, donated the proceeds from its holiday concert to the Child Development Center.

Winter snow storms halted the construction of the playground, but Charles

Douglass, big brother to preschooler Stephanie Douglass, age 3, along with a Boy Scout troop from Silver Spring, have plans to help build a new playground for the children.

Now that the daycare facility has more space, there is room for more children. Since the February move, 17 additional children have been enrolled and another teacher and aide have been hired.

There are other Federal agencies that offer daycare, but Goddard is "quite unique," according to Karth. The Child Development Center is parent-run and is incorporated as a non-profit organization. Parents make all decisions concerning the Center, including the hiring of teachers and aides. The Center celebrates its fifteenth anniversary in June.

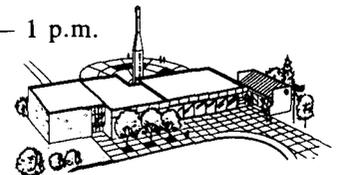
The children interviewed liked the new daycare facility from the new ceiling down to the carpet. Daniel Wright, age 5, said, "I like my new school a lot because it's big, and it has a lot of room to play in. I like it because it has a lot of tables. It has nice lockers. We have a lot of animals. I like it because we are studying about dinosaurs, and we have a lot of books."



ROOM TO GROW — Since the Goddard Child Development Center moved into its their new quarters, 17 additional children have been enrolled. Pictured: Teacher Sue Ready prepares to change the calendar from March to April with the help of one of her pre-school students.

Visitor Center—May Calendar

- May 3 — Model Rocket Demonstration Launch — 1 p.m.
- May 9 & 10 — Commemorative Films — 1 p.m.
"Where Dreams Come True"
"Freedom 7"
- May 17 — Model Rocket Launch — 1 p.m.
- May 24 — Public Program — 1 p.m.
Dr. David Thompson — "A Guided Tour Through the Universe"



The Visitor Center is open to the public five days a week, Wednesday through Sunday, from 10 a.m. to 4 p.m. There is no admission charge.

For more information, call the Visitor Center at 286-8981.

Mailroom Operations Enhanced With New Equipment . . . More Changes To Come

by David Thomas

Suppose you couldn't trash junk mail? Suppose you had to account for every errant envelope, mind every misguided missive and process every piece of postal paper in your mailbox? What if you had to do this not only for yourself, but for, say, about 9,000 people?

You're lucky. You can throw away junk mail which is properly called third class business mail.

Goddard's mailroom can't. It has to process every piece of legitimate mail, plus the junk, received for the 9,300 employees working at Greenbelt.

"We don't throw anything out," says Carol Baker, mailroom supervisor. "We process everything . . . it's our policy."

Interestingly enough, processing over 1,000,000 pieces of mail in the first four months of fiscal '87 is just one part of overall mailroom operations. But it amounts to an average of more than 14,000 pieces of mail daily, including almost 600,000 pieces of internal mail, over 450,000 labels and about 40,000 pieces of research mail, according to Mark Walther, Head, Administrative Support Branch (ASB).

"An operation of this size can never ex-

pect to be error free," says Walther, whose task is to ensure smooth operations in the mailroom with an 11-member staff of Dynamics Concepts Inc., contractor employees. "But we have efforts underway to make it more problem-free."

These efforts resulted from a four-month study by Tom Paprocki, an ASB management analyst, who scrutinized mailroom operations with a view toward providing more effective service to the Center. Recommendations and improvements highlighted by Paprocki's report are slated for implementation during 1987.

A new machine slaps on labels faster; new terminals and the Locator and Information Services Tracking System (LISTS) expedite research of uncoded mail; a new address system, scheduled to be operational this summer, will cut back significantly on the frustration of updating mailing lists.

"We could label 4,000 pieces of mail per hour with the old machine," said Marian Roby, distribution clerk. "The new machine can label 15,000 per hour."

Before the new LISTS became available, mailroom clerks Leona Johnson and Tammy Robinson had to reference three different sources to find the correct mail



LABELING MACHINE — Mailroom Clerk Marian Roby runs new labeling machine, which triples the amount of work done in same amount of time as old machine.

code for mail that arrive uncoded. Now, they simply punch up the employee's name on the LISTS terminal and the corresponding name is found, according to Baker.

Walther said there are 150 distribution or mailing lists on Center. Currently, adding, deleting or changing addresses on these lists is a cumbersome process for users and the mailroom.

"The new address system will allow distribution lists to be updated on-line at a terminal, either by a list holder or a mailroom worker," Walther said.

Soon, Baker said, nearly all equipment will be upgraded, from new sorting bins and weight scales to a single machine that folds letters and inserts them into envelopes—a job that now requires two machines. Walther said even the layout of the office space will be studied to see if it can be enhanced.

"Maybe the new mail bins will come in bright, zesty colors," said Ralph Matthews, as he presorted incoming mail. "I think that'd spruce up things just like the other improvements."

Although Baker was interrupted constantly during the hour-long interview—troubleshooting various problems, like finding the right envelopes for an 11,000-piece mailing job, giving instructions for using LISTS or making sure someone followed proper procedures—she was nonetheless humorous despite her hectic schedule.

As she ambled over in her running shoes after the final interruption, she said: "Think about us the next time you get junk mail."



MAILROOM STAFF — (left to right) Carol Baker, Marian Roby, Leona Johnson, Michael Willett, Tammy Robinson, Gregory Powell, Deborah Haas, Ralph Matthews, III and Cecile Verkaik.

Mail your story to the Goddard News (Code 130), or call the Editor at 286-7277.

NASA Hands Over Weather Satellite to NOAA

by Michael Braukus

GOES-H, the geostationary weather satellite launched February 26 by NASA, has completed a month of tests and was turned over fully-operational to the National Oceanic and Atmospheric Administration (NOAA) on Wednesday, March 25 at 10 a.m. EST.

GOES-H, which was designated GOES-7 after reaching orbit, was launched on a McDonnell-Douglas Delta 3924 from Cape Canaveral Air Force Station, FL. GOES-7 is the eighth GOES spacecraft to be launched since 1974 for transmitting cloud cover images from a geosynchronous orbit. In addition to providing cloud cover images and atmospheric temperature profiles (or "soundings"), GOES-7 will collect space environmental data and conduct an experiment for detecting emergency distress signals on the ground from geosynchronous orbit. GOES-7 was built by Hughes Aircraft Co.

NASA flight controllers from Goddard, controlled the spacecraft for four weeks while they checked out the spacecraft's systems and subsystems. This was done

from NOAA's launch control rooms in Suitland, Md. and Wallops, Va. Following the turnover, NOAA satellite service flight controllers are operating the spacecraft.

The launch was flawless except for the malfunction of two thermostatically-controlled heaters on the spacecraft's apogee kick motor (AKM). The problem was noticed three hours after launch. Goddard technicians overcame the problem and fired the AKM during the second apogee on February 27, successfully placing the satellite in geosynchronous orbit.

The GOES-7 satellite reached its check-out point at 81 degrees west longitude on March 5. Controllers started to drift the spacecraft toward its permanent location at 75 degrees west longitude on March 18. Drifting at a rate of approximately one degree per hour, GOES-7 reached its permanent station on March 24.

The first full visible image from the satellite was received on March 6. The quality of the image was excellent.

The infrared imagery system, which

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NEBA Observes 35th Anniversary of Service to NASA

The NASA Employees Benefit Association (NEBA) is now in its 35th year of service to NASA employees.

NEBA now serves some 10,000 NASA employees and has total life insurance in force of more than \$800,000,000. Since its inception in early 1952 at the Lewis Research Center, NEBA has paid claims to beneficiaries in excess of \$38,000,000.

When Dr. Hugh Dryden, director of the National Advisory Committee on Aeronautics (NACA), signed a contract with NEBA's underwriter (the Home Life Insurance Company of New York, winner from among 33 bidders representing the largest and best life insurance companies in the United States), it marked a first in government group insurance. The plan went into effect 3 years ahead of regular government life insurance, the Federal Employees Group Life Insurance (FEGLI).

When first instituted, NEBA's insurance coverage was provided in amounts from \$1,000 to \$10,000; today, depending on your age, \$23 per quarter will buy you anywhere between \$20,000 (over 55) and \$65,625 (under 30) of life insurance coverage, including double indemnity, which was not originally available. NEBA also provides dependents and travel protection plans as well as an optional life insurance program enabling NEBA plan holders to take their coverage with them after leaving NASA.

NEBA's charter states that "The association which is established for the sole purpose of providing low-cost group insurance to NASA employees, shall conduct its business for the mutual benefit of its members and their beneficiaries and not for profit." NMI 3870.1D, dated 12/11/81, signed by the NASA Administrator, further explains the purpose and role of the Association.



PARTNERSHIP STUDENTS — More than 120 eighth-graders from Goddard's partnership school, Robert Goddard Middle School, visited the new exhibits gallery at the Visitor's Center over a three-week period. This event is part of an on-going relationship which, since its initiation in 1984, has included career days, science fairs and a revolving exhibits program. While visiting the new exhibit gallery, Daryl Wooten demonstrated the gyro chair while (left to right) Charmaine Ford, Thomas Littlefield, Joe DiCarlo and Rodney Rumph waited for their turn. The gyro chair is an interactive exhibit which simulates the navigation and control of a spacecraft.

Thrift Savings Plan Implemented for Federal Employees

Federal employees—both those covered under the old Civil Service Retirement System (CSRS) and those covered under the new Federal Retirement System (FERS)—have a new way to invest in their futures and gain tax-deferred income at the same time through a newly-established Thrift Savings Plan (TSP). The thrift savings plan was established as one of the three parts of FERS.

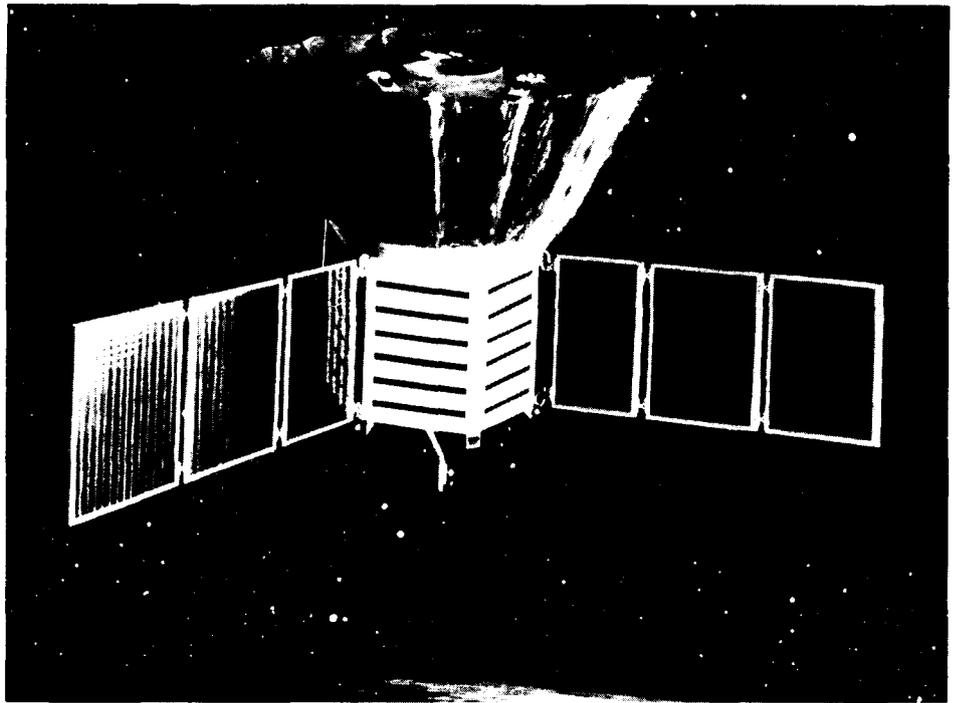
Both CSRS and FERS employees can participate in the TSP. The TSP allows employees to defer taxes, much like an Individual Retirement Account (IRA), but offers additional advantages. For employees covered under the FERS system, the government will automatically contribute 1% of your basic pay—whether you decide to invest or not—into the thrift plan for you. In addition, the government will match your investment—contributing up to an extra 4% of your basic pay. FERS employees can contribute up to 10% of their basic pay to the TSP (15% from April through September 1987). CSRS employees may contribute up to 5% of their basic pay (7½% from April through September 1987), but do not receive any contributions from the government.

Contributions by both CSRS and FERS employees will be invested in government securities in 1987. There is no risk involved in investments in government securities since they are backed by the full faith and credit of the U.S. government. Beginning in 1988, FERS employees will be given other options for investing their money. CSRS employees will not be given any other option.

The decision to participate in the TSP is much like the decision employees have under the Federal Employee Health Benefits open season because employees may opt into the thrift plan, change investments, change contribution amounts, or even decide to stop participation.

For the thrift plan, there will be three open seasons in 1987. The first open season ends on April 30, 1987. The second open season runs from May 15 through July 31, 1987. The third open season from November 15, 1987 through January 1, 1988. For each year thereafter, two open seasons for enrollment and changes of enrollment will be held.

For more information, call the FERS Hotline on X62779.



NEW CONFIGURATION — Pictured is an artist's concept of the newly-configured Cosmic Background Explorer (COBE) which will launch on a Delta expendable launch vehicle rather than the Space Shuttle, as originally planned. COBE will study the "Big Bang" the primeval explosion that is theorized to have started the expansion of the Universe. It will make a definitive exploration and study of the diffuse radiation of the universe between the wavelengths of 1 micron and 1 centimeter. The diffuse universal radiation found in this IR band (specifically the 1- to 300-micron portion), may contain a large portion, if not the dominant part, of the universal energy content, including radiation from primeval galaxies. COBE will be launched from the Western Test Range, Lompoc, CA, no earlier than early 1989.

Goddard Gears for Climate and Weather Experiments

by Carter Dove

Just north of Interstate 70 near Manhattan, central Kansas lies the Konza Prairie Natural Area, last of the great tall grass areas of the U.S.

It also is the area which scientists—including a team from Goddard—have selected for an experiment to determine how land vegetation affects climate and weather.

The experiment is known as FIFE, the First Field Experiment of the International Satellite Land Surface Climatology Project (ISLSCP)

The chief objective of the ISLSCP is to develop methods for translating satellite data into information about land surface biological and physical properties, particularly those that interact strongly with the atmosphere.

About 100 scientists now are gearing up for the May 26 start of the first of four field campaigns to take place in the Konza area this year. The scientists—including micrometeorologists, physicists and biologists—will observe the biological and

meteorological processes acting near the surface.

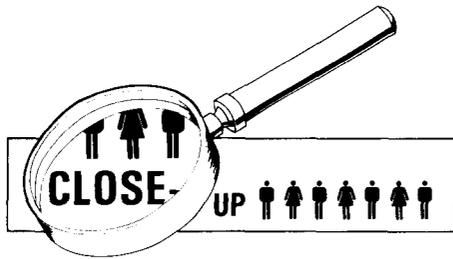
At the same time, five specially-instrumented aircraft and several Earth observation satellites will overfly the site to measure and transmit key data back to Earth.

One of the experiment scientists, Dr. Forrest Hall of the Earth Resources Branch (Code 623) of the Laboratory for Terrestrial Physics at Goddard, said the four "intensive field campaigns (IFCs)" will be conducted throughout 1987 to study the site under different seasonal conditions.

Hall described the IFCs as "periods of intensive surface and aircraft measurements."

During the IFCs, the scientists will obtain measurements on the ground and in the air of the latent and sensible heat fluxes; take airborne measurements of the surface radiation from the visible to microwave wavelengths; collect surface biophysical measurements of the vegetation

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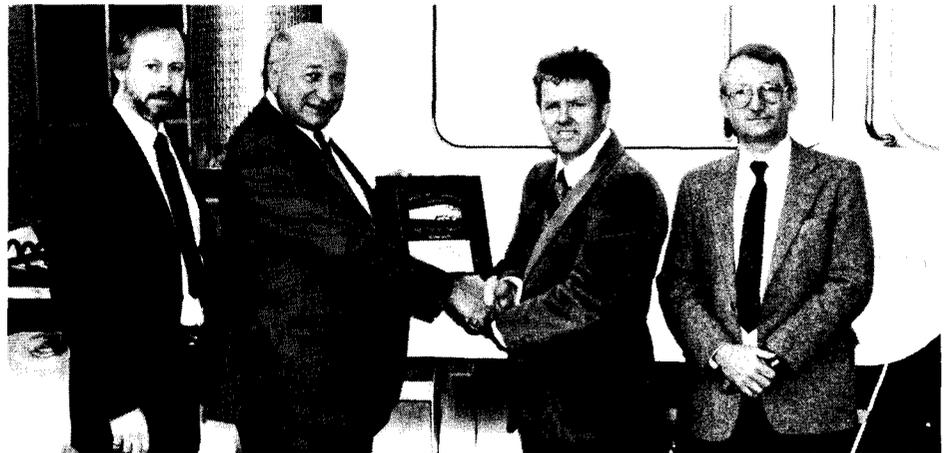
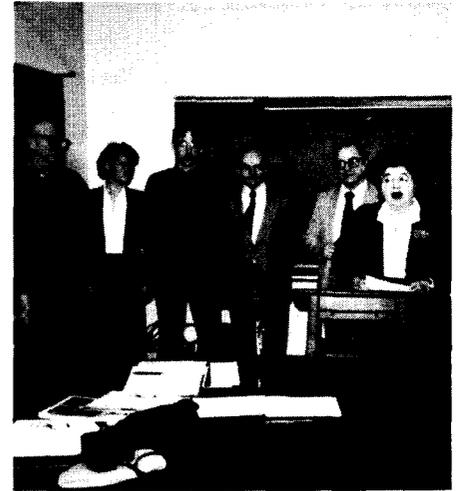
KAESE

Let's welcome **RONALD KAESE** the new Chief of the Health, Safety and Security Office. Kaese succeeds John C. Lemke who went to NASA Headquarters,

Office of Safety, Reliability, Maintainability, and Quality Assurance. Kaese comes to GSFC from the U.S. Armed Forces Command in Fort McPherson, Georgia, where he was the Safety and Health Manager. Before then, he was Chief of the Safety Office at the U.S. Army Electronics Research and Development Command in Adelphi, Maryland.

The new head of the Oceans and Ice Branch **Dr. NANCY MAYNARD** comes to Goddard from Scripps Institution of Oceanography of the University of California where she has been working on the use of the Nimbus-7 Coastal Zone Color Scanner in polar regions. Maynard has worked also for the Bermuda Biological Station for Research; Harvard University; in Alaska for both the U.S. Department of Interior and the National Oceanic and Atmospheric Administration; and in Washington with the President's Office of Science and Technology Policy and the National Academy of Sciences.

Goddard's Toastmasters Club has grown from 5 to more than 30 members since it was founded 15 years ago. The club is part of the Toastmasters International Program, an organization whose members develop their communication skills by practicing in a supportive, non-threatening environment. New officers were sworn in recently. They are (left to right): Pat Greco, Code 224.2, Sergeant of Arms; Herb Blodgett, Code 622, Secretary; Jean Resau, RMS Technologies Inc., Treasurer; Larry Hilliard, Code 727.1, Administrative Vice President; George Griffin, Code 754.1, Educational Vice President; Bob Grigsby, Code 635, President; and Lillian Barker, Toastmasters District D, Lieutenant Governor.

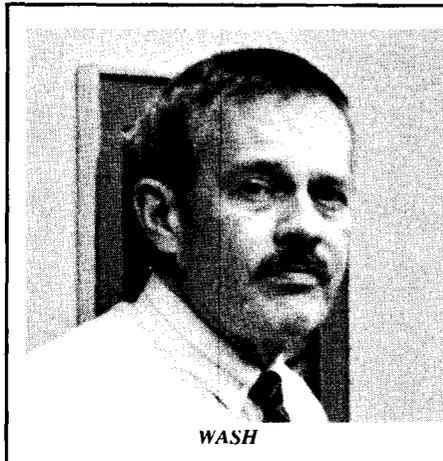


SAFE DRIVER — Jack R. Long (third from left), driver/technician for the Bendix Field Engineering Corporation (BFEC), Columbia, Md., assigned to the Compatibility Test Section at Goddard, receives the company's first 100,000-mile Safe Driving Award. Participating in the award presentation are (from left) Philip H. Johnson, BFEC vice president, space operations; Murray Weingarten, BFEC president; Long; and Robert R. Stanley, NASA, head, Simulations and Compatibility Test Branch, Mission Operations Division, GSFC.

Long's award recognizes his "dedication and outstanding accident-free driving record during the period April 1984 through December 1986 in transporting NASA's Compatibility Test Vans (CTVs) throughout the United States." During the award period, Long logged over 100,000 accident-free miles of transporting the CTVs.

NASA's CTVs are 18-wheel trailers, 60-foot long and weighing 80,000 pounds. The vehicles contain electronic equipment valued at more than \$3.4 million.

BFEC is responsible for the CTVs as part of the company's contract with GSFC to maintain and operate the Tracking and Data Relay Satellite System.



WASH

In Memorium

Former Goddard Comptroller Charles "Ed" Wash died on Friday, March 27. Wash began his career with NASA almost 30 years ago and recently, after having served as Goddard Comptroller since 1980, had gone to NASA Headquarters to take a position with the Space Station project.

Memorial contributions may be made to the Leukemia Society of America. The address is: National Leukemia Society of America, 1625 I Street, NW, Suite 923, Washington, DC 20006

With your contribution, the following needs to be included:

- The name of the deceased — Charles E. Wash
- His family's name and address — Mrs. Kathy Roth, 4807 Clemons Court, Annandale, VA 22003
- Your name and address.

Conflict of Interest: A Goddard Concern

By the time you read this article, income tax season will be over. But an issue that surfaces each year at this time—employees preparing tax returns for others as an outside employment activity—still remains a concern.

The Office of Chief Counsel wishes to alert Goddard employees to the potential problems with this activity. The preparation of tax returns for others could lead to a later finding of a violation of ethical standards or to a finding of more serious misconduct.

The Standards of Conduct for NASA Employees proscribes outside activities that might result in, or create the appearance of, a conflict of interests. Government employees are prohibited from representing another person in a proceeding in which the United States is a party or has a direct and substantial interest, with or without compensation.

It is not difficult to imagine an employee who has prepared another's tax return later being called to appear at an Internal Revenue Service audit conference. If an employee appears as a witness, relating the actions he or she took in preparing the return, he or she probably is not representing the taxpayer.

If, however, an employee defends the validity of certain deductions, exemptions, and credits taken, he or she may be considered as representing the taxpayer's interest against the U.S. Government—a position not only violative of the Standards of Conduct, but one that could subject the employee to a fine of \$10,000 or both.

For these reasons, the Office of Chief Counsel discourages Goddard employees from preparing other's tax returns. Questions about individual cases should be referred to the Office of Chief Counsel, Code 140, extension 8887.

Climate Experiments

Continued from page 6

(prairie grasses) and soil; and develop vertical profiles of the water vapor and carbon dioxide in the air above the test sites.

FIFE will use a number of highly-instrumented aircraft, including the NASA C-130.

"The major research goal of FIFE will be the development of techniques to relate point and local area surface measurements to the equivalent area-average values from satellites," Hall said.

Dr. Piers Sellers of the University of Maryland, a FIFE associate of Dr. Hall, will be one of the primary users of the results generated by FIFE. Sellers, instrumental in the design of FIFE, is combining computer models of vegetation with global weather models to improve the understanding of how vegetation interacts with the atmospheric circulation.

Sellers said that "the results of FIFE should greatly improve our ability to understand the climate system as a whole—atmosphere and biosphere."

The following scientists, all from Goddard, also are associated with Hall on FIFE:

Drs. P.J. Camillo, Bhaskar Choudhury and Robert J. Gurney, Code 624; and Dr. Donald W. Deering, James R. Irons, Brian L. Markham, Elizabeth M. Middleton and Stephen G. Ungar, Code 623.

Two elements of the international World Climate Program (WCP), the World Climate Impact Program (WCIP) and the World Climate Research Program (WCRP), provide a major influence and input for the ISLSCP.

The objective of the WCIP is to evaluate the effects of climatic fluctuations on global agriculture, livestock, energy, water and human resources. The WCRP's goals are to determine to what extent climate can be predicted and the extent of human influence on climate.

Retirees

Farewell and best of luck to the following retirees who left Goddard in March!

	Code	Years
Balasubrahmanyam, V.	661	22
Chambers, J.	552.1	31
Opp, A.	660	34
Womack, W.	300	25

Ten Rockets

Continued from page 2

Other experiments involved in these rocket flights were from NASA, AFGL, DMI, University of Alaska, Clemson University, Naval Research Laboratory, Southwest Research Institute, and the Franklin Research Center. Ground-based experiments included scientists from Stanford Research Institute, International; Boston University; Cornell University; Lockheed Corporation; the University of Michigan; and Technology International Corporation.

Weather Satellite

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provides continuous 24-hour coverage, was tested on March 17. This system is a valuable tool to meteorologists. It observes and measures the temperature, altitude, and energy levels of clouds during night-fall, when the GOES primary imagery system is inoperable because of darkness.

At its position at 75 degrees west longitude, the satellite will become GOES East, providing primary weather coverage for the East coast of the United States. A twin satellite (GOES-6) at 135 degrees west longitude will provide coverage for the western half of the United States as GOES West.

Currently, GOES-6 is located at 98 degrees west longitude to provide the widest possible coverage of the United States from only one satellite. It was moved from its normal position of 135 degrees west longitude two years ago when the optical encoder of the then GOES East (GOES-5) imaging and sounding system failed.

NOAA controllers are moving GOES-6 to 135 degrees. It will arrive on station on or about April 28, they said.

The encoder lamps on GOES-7 are designed to operate at a lower voltage with lower intensity to increase their operating lifetime. In addition, a redundant encoder, equipped with light-emitting diodes, has been installed.



Goddard News

The GODDARD NEWS is published monthly by the Office of Public Affairs, Goddard Space Flight Center, Greenbelt, MD 20771. Deadline for submitted material is the first of each month. For additional information, contact Rande Exler, 286-7277. The GODDARD NEWS staff is:

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